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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,626	03/19/2004	Raymond E. Cellemme	1970/50	7850

7590 11/17/2005

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EXAMINER	
PRICE, CRAIG JAMES	
ART UNIT	**PAPER NUMBER**
3753	

DATE MAILED: 11/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/804,626	CELLEMME ET AL.	
	Examiner	Art Unit	
	Craig Price	3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) *16 and 17* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-17* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *6/10/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

   I. Claims 1-15, are drawn to the backflow prevention apparatus, classified in class 137, subclass 512.00.

   II. Claims 16-17, are drawn to the endless resilient seal, classified in class 105, subclass 377.07

Inventions II and I are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the details of the subcombination, as recited in claim 1, are not required for patentability in the combination, as recited in claim 16. The subcombination has separate utility such as sealing a cover for a container.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

2. A telephone call was made to applicant's attorney, Mr. W. Thad Adams III, on November 8, 2005 to request an oral election to the above restriction requirement. A provisional election was made without traverse to prosecute the invention of Group I,

claims 1-15, drawn to figures 1,2,3,6 and 7. Affirmation of this election, must be made by applicant in replying to this office action. Group II, claims 16 and 17 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

DETAILED ACTION

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 8 (d) is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

I – As to claim 8, lines 1-3, it is unclear by what is meant by the claimed limitation, " a pair of spaced apart valve housing flanges carried by the cylindrical valve housing being spaced apart by a second width, wherein the first width is greater than the second width". Further, it is unclear as to the location of the first and second widths where, " a pair of spaced apart valve housing flanges carried by the cylindrical valve housing being spaced apart by a second width, wherein the first width is greater than the second width". Please clarify.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1,2,4,5,8,9,10,11,14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sisk (US 6,679,289) in view of Bateson (US 4,461,219).

Regarding claims 1,2,4,5,8,9,10,11,14 and 15, Sisk discloses a check valve, comprising, a valve housing (1) having an access port (C) for removal and reinstallation of an internal mechanism without the removal of the valve housing from a piping system, an arcuate cover (2) for closing the access port, the cover has at least one cover flange (37) for clamping to a mating valve housing flange disposed on the valve housing, an endless resilient gasket (12) for providing a seal between the cover and the valve housing, comprising a gasket web, the gasket being positioned on a peripheral

edge of the access port, with the gasket web positioned adjacent to the peripheral edge in sealing contact with the cover and the valve housing (Col. 3, Lns. 52-55 and in Col. 4, Lns. 54-60), a fastener (3) for clamping the cover to the valve housing, the fastener comprises at least one bolt extending through a hole in the cover flange and a corresponding hole in the valve housing flange, wherein the cover is shaped to provide a substantially uniform clamping force to the gasket, wherein the cover has a height measured from the cover flange to a top centerline of the cover, the first width being greater than the height, as seen in Figures 1,2 and 8. The steps of "providing a valve housing having an access port for removal and reinstallation of an internal mechanism" and "fastening the cover flange to the mating valve housing flange using the fastener" are disclosed in (Col. 9, Lns. 3-9).

Sisk lacks the gasket web having a pair of legs, wherein the gasket web connects the legs to form a generally U-shaped cross-section and the legs positioned on opposite sides of the peripheral edge in sealing contact with the cover and the valve housing. Bateson discloses a single lever hatch cover having a gasket (32), having a pair of legs, wherein the gasket web connects the legs to form a generally U-shaped cross-section and the legs positioned on opposite sides of the peripheral edge in sealing contact with the cover (20,42) and the valve housing (28).

In view of the patent of Bateson, it would have been obvious to one of ordinary skill in the art at the time of invention, to replace the flat thin gasket of Sisk with Batesons's gasket web having a pair of legs, wherein the gasket web connects the legs to form a generally U-shaped cross-section and the legs positioned on opposite sides of

the peripheral edge in sealing contact with the cover and the valve housing, in order to provide a larger area of sealing contact onto the housing to eliminate the risk of the seal extruding from high pressure, and in order to protect the seal from damage.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sisk (US 6,679,289) and Bateson (US 4,461,219) and further in view of Liljegren (US 1,672,572).

Sisk and Bateson have taught all of the features of the claimed invention, but lacks the cover and valve housing are connected by at least one hinge for permitting the cover to move away from and into contact with the resilient gasket. Liljegren discloses the use of a cover (17) and valve housing (10,14) are connected by at least one hinge (18) and in (Col. 1, Lns. 41-53).

In view of the patent of Liljegren, it would have been obvious to one of ordinary skill in the art at the time of invention, to replace the cover of Sisk and Bateson, with the cover and hinge of Liljegren, to have a cover and valve housing are connected by at least one hinge for permitting the cover to move away from and into contact with the resilient gasket, in order to provide a means by which the cover does not become displaced during installation/maintenance of the check valves within the valve housing.

7. Claims 6,7,12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sisk (US 6,679,289) and Bateson (US 4,461,219) and further in view of Morvant (US 5,615,896).

Sisk and Bateson have taught all the features of the claimed invention, wherein the gasket has a hardness, although lacks that the gasket has an elastomer hardness of about 70 durometer to about 90 durometer on a Shore A scale, and the gasket has an

elastomer hardness of about 80 durometer on a Shore A scale. Morvant discloses the use of a seal, where the material "has a 50 to 95 durometer reading on the Shore A durometer scale" (Col. 3, Lns. 43-46).

In view of the patent of Morvant, it would have been obvious to one of ordinary skill in the art at the time of invention, to modify the gasket of Sisk, with the gasket material of Morvant, to have an elastomer hardness of about 80, in order to provide a gasket having a material with a higher durometer which would resist extruding under high pressure.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Noll et al. (US 6,581,626), Powell (US 6,478,047), Neuzeret (US 5,080,122), and Noll et al. (US 2004/0134537) all disclose similar valve assemblies.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig Price whose telephone number is (571) 272-2712. The examiner can normally be reached on 8AM - 5PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Blau can be reached on (571) 272-4406. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CP

November 10, 2005

STEPHEN BLAU
PRIMARY EXAMINER